

Approval #

980013-U (Replaces 920089-U)

Safety & Buildings Division 201 West Washington Avenue P.O. Box 2689 Madison, WI 53701

# Wisconsin Material Approval

Material

Horner Ezy Chek and Horner Ezy Chek II Pipeline Leak Detection Systems Line Tightness Tests

Manufacturer

Horner Creative Products, Inc. 212 Morton Street Bay City, Michigan 48706

#### SCOPE OF EVALUATION

The Horner Ezy Chek and Ezy Chek II pipeline leak detection systems manufactured by Horner Creative Products, Inc., have been evaluated in conformance with **secs. ILHR 10.125, 10.615** (2) of the Wisconsin Administrative Flammable and Combustible Liquids Code.

#### **DESCRIPTION AND USE**

The Horner Ezy Chek is a manual system in which the loss of product is read by the operator from a test cylinder having graduations on a site tube. Test data are recorded manually and calculations necessary to reduce and analyze the data are done by the operator on site.

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The Horner Ezy Chek II is a computerized system that measures the weight of product lost in a test cylinder through the use of a load cell. Data are recorded and calculations are performed by the computer.

Both Ezy Chek systems may be used on systems containing gasoline, diesel, aviation fuel, fuel oil #4, solvents and waste oil.

Both Ezy Chek pipeline leak detection systems use a preset threshold and a single test to determine whether a pipeline is leaking. The systems declare a leak if the output of the measurement system exceeds a threshold of 0.05 gallon per hour and alert the test operator. The systems may be used when trapped vapor is present in the pipeline. Tests of pressurized lines are conducted at 150% of the operating pressure and tests of suction lines are conducted at 7 to 13 psi.

The waiting period between the last delivery of product to the tank and the start of data collection is 1/2 hour. The waiting period between the last dispensing of product through the pipeline system and the start of data collection is 1/2 hour. The total time for data collection shall be at least 1.1 to 1.75 hours for the Ezy Chek II and at least 1 hour for the Ezy Chek system.

There are no acceptable deviations to the test protocol.

### TESTS AND RESULTS

The performance of the Ezy Chek pipeline leak detection systems was determined by W. A. Kibbe and Associates, Inc., using the EPA protocol for evaluation of pipeline leak detection systems. When used as a line tightness test, the systems are capable of detecting a 0.1 gallon per hour leak at 50 psi with a  $P_{\rm FA}$  of 0 percent and a  $P_{\rm D}$  of 100 percent.

The EPA test procedure used addressed only the issue of the methods ability to detect leaks and not safety hazards.

#### LIMITATIONS OF APPROVAL

The Ezy Chek and Ezy Chek II leak detection systems are approved for use on pipeline systems for underground storage tank facilities that are constructed of steel, copper or fiberglass with a volume of 18.5 gallons or less.

The operating instructions and test procedures specified by Horner Creative Products, Inc., shall be used to conduct all tests. The leak detection equipment shall not be changed by subsequent modifications. Mechanical line leak detectors shall be removed from the pipeline.

This approval will be valid through December 31, 2003, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

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## **DISCLAIMER**

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by:	-	
Approval Date:	By: _	
		Ms. Berni Mattsson, P.E.
		Chief, Material Approval Unit
		Program Development Bureau

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